What Is Claimed Is:

1. A micromechanical component comprising:

a substrate;

at least one structured layer on the substrate, wherein at least one functional structure is formed in the at least one structured layer;

a cap covering the functional structure, wherein at least one cavity is formed between the cap and the at least one functional structure; and

a connecting layer to connect the cap with the structured layer, wherein the connecting layer is formed by an anodically bondable glass having a thickness in a range of 300 nm to 100 μm.

2. The micromechanical component of claim 1, wherein the anodically bondable glass has a defined ion concentration.

3. The micromechanical component of claim 1, wherein at least one terminal area is formed in the substrate to externally contact the at least one functional structure, the at least one terminal area being electrically insulated from the substrate by an insulating frame formed by trenches.

4. The micromechanical component of claim 3, wherein the terminal area is formed by a part of the substrate, the substrate being doped such that the terminal area is low-resistance.

5. The micromechanical component of claim 1, wherein, between the substrate and the cap, at least one supporting element is provided in the at least one structured layer.

6. The micromechanical component of claim 5, wherein the substrate has a thickness between ca 80 μm and 150 μm.

7. The micromechanical component of claim 5, wherein the terminal area is positioned one of next to the at least one functional structure and below the at least one supporting element in the substrate.

8. The micromechanical component of claim 1, wherein the micromechanical component includes the substrate and the at least one structured layer, which is provided on at least one part of the substrate and is covered at least partly by the cap, and a conductive connection is provided between the cap and the substrate which extends all the way through the at least one structured layer and is positioned near a frame structure of the at least one structured layer.

9. The micromechanical component of claim 8, wherein the conductive connection is formed by a passage on whose bottom surface and wall surfaces a conductive layer is deposited, the at least one of the passage and the conductive layer being covered by at least one insulating layer on a side of the substrate opposite the at least one structured layer.

10. The micromechanical component of claim 3, wherein the terminal area is in contact with at least one printed circuit trace on a side of the substrate facing the at least one structured layer, and is furnished with a metallic layer on a side of the substrate opposite the at least one structured layer, at least one insulating layer being provided between the metallic layer and the substrate.

11. The micromechanical component of claim 1, wherein the cap, the substrate, and the at least one structured layer are made at least partially of a same material.

12. A method for producing a micromechanical component having at least one structured layer, in which at least one cap is connected to regions of the at least one structured layer and covers the at least one structured layer at least partially, the method comprising:

bonding the cap to the regions of the at least one structured layer using a connecting layer that produces a chemical bond when at least one of an electrical voltage and a temperature is applied to it, the chemical bond occurring between the connecting layer and at least one of the regions of the at least one structured layer and the cap.

13. The method of claim 12, wherein the bonding of the cap with the regions of the at least one structured layer includes:

chemically bonding the cap to the connecting layer; and

chemically bonding the regions of the at least one structured layer to a side of the connecting layer facing the at least one structured layer while, at approximately the same time, enclosing at least one of a gas and vacuum in at least one cavity formed between the cap and the at least one structured layer.

14. The method of claim 12, wherein the connecting layer includes at least one of a glass and a glass-type material having a specified ion concentration.

15. The method of claim 12, wherein the regions of the at least one structured layer have connecting surfaces, the connecting surfaces and a side of the cap facing the connecting layer being at least one of chemically and mechanically treated before the bonding, so that they have a comparatively slight surface roughness.

16. The method of claim 12, wherein the connecting layer is treated at least one of chemically and mechanically before bonding to the connecting surfaces of the at least one structured layer, so that it has a slight surface roughness.

17. The method of claim 12, wherein the connecting layer is formed from at least one of: a glass wafer by reducing its thickness to about 10 to 50 μm; a silicate glass fusion; and by sputtering on a glass layer.

18. The method of claim 17, wherein the silicate glass fusion includes at least one of alkali silicate and borosilicate.

19. The method of claim 17, wherein the glass layer is in the range of 300 nm to 2 μm.

20. The micromechanical component of claim 1, wherein the thickness of the anodically bondable glass is in the range of 300 nm to 50 μm.

21. The micromechancial component of claim 2, wherein the anodically bondable glass includes at least one of alkali silicate and borosilicate.

22. The micromechanical component of claim 5, wherein the at least one supporting element is positioned largely in a center of the cavity.

23. The micromechanical component of claim 6, wherein the substrate has a thickness of ca 80 μm to 100 μm.

24. The micromechanical component of claim 9, wherein the at least one of the passage and the conductive layer is covered by at least one insulating layer on a side of the substrate opposite the at least one structured layer.

25. The micromechanical component of claim 11, wherein the same material is silicon.

26. The micromechanical component of claim 25, wherein the cap and the substrate are made of monocrystalline silicon and the at least one structured layer is made of polycrystalline silicon.

27. The method of claim 14, wherein the connecting layer includes at least one of an alkali silicate or a borosilicate.

28. The method of claim 15, wherein the slight surface roughness is 2 to 40 nm.

29. The method of claim 16, wherein the slight surface roughness amounts to 2 nm or less.